

# Notice of Allowability

Application No.

09/994,188

Examiner

Irakli Kiknadze

Applicant(s)

CHOPRA ET AL.

Art Unit

2882

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the Amendment filed 6/7/2006.
2. ☒ The allowed claim(s) is/are 2,5,13-16,18-20 and 35-37.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

IK

### **DETAILED ACTION**

1. In response to the Office action dated April 7, 2006 The Amendment has been received on June 7, 2006.

Claim 2 has been amended.

Claims 2, 5, 13-16, 18-20 and 35-37 are currently pending in this application.

### ***Allowable Subject Matter***

2. Claims 2, 5, 13-16, 18-20 and 35-37 are allowed.

3. The following is an examiner's statement of reasons for allowance:

Claim 2 is allowed because prior art fails to teach or make obvious an x-ray imaging system comprising a substrate comprising material compatible with a semiconductor manufacturing process and a gas detector formed on the substrate wherein an x-ray stopping component is arranged between a first and second chambers, the x-ray stopping component operative to absorb off-axis photons as claimed including all of the limitations of the claim 1. Claims 13 and 14 are allowable by virtue of their dependence.

Claims 5 and 35 are allowed because prior art fails to teach or make obvious an imaging system and a pixilated gas detector comprising a first and a second gas reservoir pneumatically communicating with the a first chamber such that gas from

either the first or the second gas reservoir can be selectively provided to the first chamber as claimed including all of the limitations of claims 5 and 35. Claims 36 and 37 are allowable by virtue of their dependence.

Claim 15 is allowed because prior art fails to teach or make obvious an x-ray imaging method comprising steps of using a semiconductor fabrication technique to form on a provided substrate, a first chamber, a second chamber and an x-ray stopping component between the first and second chamber including all the limitations of claim 15. Claims 16 and 18-20 are allowable by virtue of their dependence.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Response to Arguments***

4. Applicant's arguments, see pages 5-9, filed June 7, 2006, with respect to Claims 2, 13 and 14 have been fully considered and are persuasive. The rejection of claims 2, 13 and 14 has been withdrawn.

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Spergel et al. (US Patent 3,418,474) and Beyne et al. (US Patent 6,362,484) teach the x-ray imaging systems comprising gas detectors.

Art Unit: 2882


6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Irakli Kiknadze whose telephone number is 571-272-2493. The examiner can normally be reached on 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Glick can be reached on 571-272-2490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Irakli Kiknadze  
June 12, 2006

IK

  
EDWARD J. GLICK  
SUPERVISORY PATENT EXAMINER